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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,937

06/09/2005

Robin C. Furneaux

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BACHMAN & LAPOINTE, P.C.

900 CHAPEL STREET

SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

PATEL, VIP

ART UNIT

PAPER NUMBER

2879

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/518,937

Applicant(s)

FURNEAUX ET AL.

Examiner

Vip Patel

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19 and 21-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19, 21-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 19, 21, 24, 29, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (US 6137212) or Kosmahl (US 4780684) in view of Wilshaw (US 6034468).

Regarding claims 19, 29, and 37 Liu discloses a cold cathode field emission device/flat lighting element (40 of figure 9) comprising a base electrode/cathode layer (22), a translucent dielectric layer or a spacer(32a, 36a), pores (not labeled but seen in figure 9), emitter cathodes/rods (electrically conductive material 30) arranged with the pores, a translucent/transparent counter electrode/anode (56), and luminescent material (58). Similarly, in figure 1, Kosmahl also discloses all the elements of claim 19. Liu or Kosmahl does not exemplify/teach base electrode constructed from Al and dielectric layer constructed from anodized Al oxide alloy layer.

However, in the same field of endeavor, Wilshaw discloses such a base electrode constructed from Al (see line 3 of column 5) and dielectric layer constructed from anodized Al oxide alloy layer (see line 66 of column 4). Thus, it would have been

obvious at the time the invention was made to a person having ordinary skill in the art to provide a base layer made of Al and a dielectric layer made of anodized Al oxide alloy layer as taught by Wilshaw in the device of Liu or Kosmahl for the purpose of obtaining a device that is operationally superior and longer lasting.

Regarding claim 21, Liu's or Kosmahl's luminescent material is arranged as layer covering the pores.

Regarding claim 24, Liu or Kosmahl discloses a layer of intermediate electrode (34a, 22 or 40).

Claims 22-23 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (US 6137212) or Kosmahl (US 4780684) in view of Wilshaw (US 6034468).

As per claims 22-23, Liu et al or Kosmahl discloses all the limitations of claims 22-23 except other specific placement of the luminescent material (ie, in the pores, on the wall of the pores). However, Liu already discloses one specific placement (as claimed in claim 19) of the phosphor material (ie, on a counter electrode or anode) and claimed placements of phosphor material are mere alternative ways for obtaining same results. Therefore, such limitations are a matter of design alternative. Alternatively, these limitations are not deemed patentable since the applicant's disclosure fails to show such limitations to solve any problems or to yield any unobvious advantage that is not within the scope of the teachings applied. Therefore, such limitations would be a matter of design alternative.

Regarding claims 34-36, the limitations of claims 34-36, which are directed to the process of making the lamp, are not deemed positive product limitation. Accordingly, no patentable weight has been given to such limitations (see MPEP 2113).

Claims 25, 26, 28, 30, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (US 6137212) or Kosmahl (US 4780684) and common knowledge in the art as evidenced by Wedding (US 5793158).

Regarding claims 30 and 33, Liu or Kosmahl discloses all the limitations of claims 30 and 33 except the pores containing a plasma (inert gas) and matrix addressing. providing of electric potential to selective cathodes and anodes for activating selective pixels). However, such providing of plasma gas within a pore or channel and providing of matrix addressing is notoriously known in the art for obtaining an illuminated specific shape of picture or display. Wedding evidences such above common knowledge. Additionally, as per claims 25, 26, 28, 31, and 32 selecting of suitable material for anode, cathode, and protective layer is notoriously known in the art for having viewing display through anode, protecting phosphor layer, and having efficient operable display device.

Thus, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide plasma and matrix addressing as taught by common knowledge for the device of Liu or Kosmahl for the purpose of obtaining an illuminated specific shape of picture or display and for having/viewing display through anode, protecting phosphor layer, and having efficient operable display device.

### **Response to Arguments**

Applicant's filed arguments have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vip Patel whose telephone number is (571) 272-2458. The examiner can normally be reached on 5.30am- 2pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Vip Patel/  
Primary Examiner  
Art Unit 2879**